

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NM-41-AD; Amendment 39-13054; AD 2003-04-06]**

**RIN 2120-AA64**

### **Airworthiness Directives; Various Aircraft Equipped With Honeywell Primus II RNZ-850/-851 Integrated Navigation Units**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that is applicable to various aircraft equipped with a certain Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit. As one alternative for compliance, this action provides for a one-time inspection to determine whether a certain modification has been installed on the Honeywell Primus II NV850 Navigation Receiver Module, which is part of the Integrated Navigation Unit. In lieu of accomplishing this inspection, and for aircraft found to have an affected navigation receiver module, this action provides for revising the aircraft flight manual to include new limitations for instrument landing system (ILS) approaches. This action is necessary to ensure that the flightcrew has an accurate glideslope deviation indication. An erroneous glideslope deviation indication could lead to the aircraft making an approach off the glideslope, which could result in impact with an obstacle or terrain. This action is intended to address the identified unsafe condition.

**DATES:** Effective March 11, 2003.

Comments for inclusion in the Rules Docket must be received on or before April 25, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-41-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address:

[9-anm-iarcomment@faa.gov](mailto:9-anm-iarcomment@faa.gov). Comments sent via fax or the Internet must contain "Docket No. 2003-NM-41-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The information referenced in this AD may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

**FOR FURTHER INFORMATION CONTACT:** George Mabuni, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5341; fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** The FAA has received reports indicating that erroneous glideslope indications have occurred on certain Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-145 series airplanes. In these incidents, the glideslope deviation indicator unexpectedly changed from a centered position to a hard-fly-down or hard-fly-up indication during an instrument landing system (ILS) approach. These incidents have been attributed to discrepancies of certain Honeywell Primus II NV-850 Navigation Receiver Modules that are part of the Honeywell Primus II RNZ-850/-851 Integrated Navigation Units installed on the affected airplanes. An affected navigation receiver module may produce an erroneous glideslope deviation indication when operating in a narrow range of cold temperatures with the glideslope receiver tuned to certain frequencies. An erroneous glideslope deviation indication could lead to the aircraft making an approach off the glideslope, which could result in impact with an obstacle or terrain.

Affected Honeywell Primus II RNZ-850/-851 Integrated Navigation Units are installed on numerous aircraft models. Affected aircraft models include, but are not limited to, BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes; Bombardier BD-700-1A10 series airplanes; Bombardier CL-215-6B11 (CL415 variant) series airplanes; Cessna Model 560, 560XL, and 650 airplanes; Dassault Model Mystere-Falcon 50 series airplanes; Dornier Model 328-100 and -300 series airplanes; EMBRAER Model EMB-135 series airplanes; Learjet Model 45 airplanes; Raytheon Model Hawker 800XP and Hawker 1000 airplanes; and Sikorsky Model S-76A, S-76B, and S-76C aircraft. All aircraft models equipped with affected integrated navigation units may be subject to the same unsafe condition revealed on the EMBRAER Model EMB-145 series airplanes.

### **Explanation of the Requirements of the Rule**

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to ensure that the flightcrew has an accurate glideslope deviation indication. An erroneous glideslope deviation indication could lead to the aircraft making an approach off the glideslope, which could result in impact with an obstacle or terrain. As one alternative for compliance, this AD provides for a one-time inspection to determine whether an affected navigation receiver module is installed. In lieu of this inspection, and for aircraft with an affected navigation receiver module, the AD also requires revising the Limitations section of the aircraft flight manual to include new limitations for ILS approaches.

### **Relevant Technical Discussions**

During the development of this AD, the FAA received information demonstrating that the planned AD would present significant operational difficulties for affected operators. First, we learned that accomplishing the inspection specified in paragraph (b) of this AD within the specified compliance time could result in service delays and out-of-service time for affected aircraft. We also received information that the revision to the Limitations section that we were considering was too restrictive for certain airplanes and would have an adverse impact on operations. Further, because a majority of the fleet of affected aircraft is expected to be equipped with an affected navigation receiver module, we found that the adverse impact of this AD would be widespread.

In light of this information, we held further discussions with the manufacturer of the subject parts and representatives of industry. Data presented during these discussions led us to reconsider the degree of urgency of the identified unsafe condition and the requirements of this AD.

### **Interim Action**

This is considered to be interim action. The manufacturer has advised that it currently is developing a modification that will address the unsafe condition addressed by this AD. Once this modification is developed, approved, and available, the FAA may consider additional rulemaking.

### **Determination of Rule's Effective Date**

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2003-NM-41-AD." The postcard will be date stamped and returned to the commenter.

### **Regulatory Impact**

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE

Aircraft Certification Service  
Washington, DC



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2003-04-06 Various Aircraft:** Amendment 39-13054. Docket 2003-NM-41-AD.

**Applicability:** Aircraft, certificated in any category, equipped with a Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit having a part number identified in Table 1 of this AD; including, but not limited to BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes; Bombardier BD-700-1A10 series airplanes; Bombardier CL-215-6B11 (CL415 variant) series airplanes; Cessna Model 560, 560XL, and 650 airplanes; Dassault Model Mystere-Falcon 50 series airplanes; Dornier Model 328-100 and -300 series airplanes; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 and -145 series airplanes; Learjet Model 45 airplanes; Raytheon Model Hawker 800XP and Hawker 1000 airplanes; and Sikorsky Model S-76A, S-76B, and S-76C aircraft. Table 1 of this AD follows:

**Table 1.—Integrated Navigation Unit Part Numbers**

Part numbers
7510100-811 through 7510100-814 inclusive
7510100-831 through 7510100-834 inclusive
7510100-901 through 7510100-904 inclusive
7510100-911 through 7510100-914 inclusive
7510100-921 through 7510100-924 inclusive
7510100-931 through 7510100-934 inclusive

**Note 1:** This AD applies to Honeywell Primus II RNZ-850/-851 Integrated Navigation Units installed on any aircraft, regardless of whether the aircraft has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For aircraft that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To ensure that the flightcrew has an accurate glideslope deviation indication, accomplish the following:

## **Compliance Time for Action**

(a) Within 5 days after the effective date of this AD, accomplish the requirements of either paragraph (b) or (c) of this AD.

## **Inspection To Determine Part Number**

(b) Perform a one-time general visual inspection of the modification plate for the Honeywell Primus II NV-850 Navigation Receiver Module; part number 7510134-811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit; to determine if Mod "L" has been installed. The modification plate is located on the bottom of the Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit, is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 Navigation Receiver Module. If Mod "L" is installed, the letter "L" will be blacked out.

(1) If Mod "L" is installed, before further flight, do paragraph (c) of this AD.

(2) If Mod "L" is not installed, no further action is required by this paragraph.

**Note 2:** For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

**Note 3:** For more information on the inspection specified in paragraph (b) of this AD, refer to Honeywell Technical Newsletter A23-3850-001, Revision 1, dated January 21, 2003.

## **Aircraft Flight Manual Revision**

(c) Revise the Limitations section of the aircraft flight manual (AFM) to include the following statements (which may be accomplished by inserting a copy of the AD into the AFM):

### **Flight Limitations**

When crossing the Outer Marker on glideslope, the altitude must be verified with the value on the published procedure.

For aircraft with a single operating glideslope receiver, the approach may be flown using normal procedures no lower than Localizer Only Minimum Descent Altitude (MDA).

For aircraft with two operating glideslope receivers, the aircraft may be flown to the published minimums for the approach using normal procedures if both glideslope receivers are tuned to the approach and both crew members are monitoring the approach using independent data and displays.

### **Parts Installation**

(d) As of the effective date of this AD, no person may install a Honeywell Primus II NV-850 Navigation Receiver Module on which Mod "L" has been installed, on the Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit of any airplane, unless paragraph (c) of this AD is accomplished.

## **Alternative Methods of Compliance**

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance or Operations Inspector, as applicable, who may add comments and then send it to the Manager, Los Angeles ACO.

**Note 4:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

## **Special Flight Permits**

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

## **Effective Date**

(g) This amendment becomes effective on March 11, 2003.

Issued in Renton, Washington, on February 14, 2003.  
Vi L. Lipski,  
Manager, Transport Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 03-4238 Filed 2-21-03; 8:45 am]  
BILLING CODE 4910-13-P